

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

ALLOWABLE SUBJECT MATTER

The Examiner's indication of the allowability of the subject matter of claims 3-7, 11-13, 24-37 and 49-51 is respectfully acknowledged.

Independent claims 1, 17, and 47 have been amended to incorporate the allowable subject matter of claims 3, 24 and 49, respectively.

In addition, the claims have been amended to make some minor grammatical improvements and/or to correct some minor antecedent basis problems so as to put the claims in better form for issuance in a U.S. patent. In particular, the informality pointed out by the Examiner with respect to claim 8 has been corrected, thereby overcoming the rejection under 35 USC 112, second paragraph.

No new matter has been added, and no new issues with respect to patentability have been raised.

Accoridngly, it is respectfully requested that the amendments to the claims be approved and entered, and it is respectfully submitted that amended independent claims 1, 17 and 47, as well as each of claims 2, 4-16, 18-23, 25-46, 48 and 50-51

respectively depending therefrom, are all in condition for immediate allowance.

RE NEW CLAIMS 52-54

New claim 52 has been added to more clearly recite the distinguishing features of the present invention based on original claim 1. New claim 53 has been added to more clearly recite the distinguishing features of the present invention based on original claim 17. And new claim 54 has been added to more clearly recite the distinguishing features of the present invention based on original claim 47.

In particular, it is respectfully pointed out that new claims 52 and 53, and 54 recite the features of the present invention whereby the display device has a structure for applying a charge voltage having a voltage value corresponding to a voltage to be applied to the optical elements using the driving currents, before the driving currents are supplied to the optical elements corresponding to a given scanning line of the display panel. Significantly, according to new independent claims 52-54, the supplying of the driving currents is performed in a state where a potential of the given scanning line is set to a potential such that the driving currents flow through the display elements, whereas the applying of the charge voltage is performed in a state where the potential of the scanning lines is set to a

potential such that no driving current flows through the display elements.

USP 6,608,620 ("Suzuki et al") discloses applying a constant voltage pulse is applied before a constant current pulse is applied. However, as shown in Figs. 13 and 14, the constant voltage pulse and the constant current pulse are applied with row electrodes 310 kept at a high level, so that a pixel transistor 302 is brought into conduction. Accordingly, it is respectfully submitted that Suzuki et al clearly does not disclose applying the charge voltage in a state where the potential of the scanning lines is set to a potential such that no driving current flows through the display elements.

It is respectfully pointed out, moreover, that in the structure of Suzuki et al, the entire application period for both the constant-voltage pulse and the constant current pulse constitutes the PWM period (Fig. 13). Because of this, since there is always an application period for the constant voltage pulse, in a low level gradation sequence in the PWM control (i.e, when there is substantially no application period for the constant current), it is not possible to perform accurate gradation sequence control.

By contrast, according to the structure of the present invention as recited in new claims 52-54, since the optical elements generate a reverse bias, the application of the charge

voltage can be performed without emission of light. For this reason, the application period for the driving current alone can be allotted for the PWM period. And as a result, the display device of the present invention as recited in new claims 52-54 has the advantageous effect that accurate gradation sequence control can be performed even in a low level gradation sequence.

Accordingly, it is respectfully submitted that new claims 52-54 patentably distinguish over Suzuki et al under 35 USC 102 and 35 USC 103, along with the allowable claims.

CLAIM FEE

The application was originally filed with 51 claims of which 3 were independent, and the appropriate claim fee was paid for such claims. The application now contains 51 claims, of which 6 are independent. Accordingly, a claim fee in the amount of \$600.00 for the addition of 3 extra independent claims is attached hereto. In addition, authorization is hereby given to charge any additional fees which may be determined to be required to Account No. 06-1378.

* * * * *

In view of the foregoing, entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

Application No.10/821,480
Response to Office Action

Customer No. 01933

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,

/Douglas Holtz/

Douglas Holtz
Reg. No. 33,902

Frishauf, Holtz, Goodman & Chick, P.C.
220 Fifth Avenue - 16th Floor
New York, NY 10001-7708
Tel. No. (212) 319-4900
DH:iv
encs.